

FIGURE 1

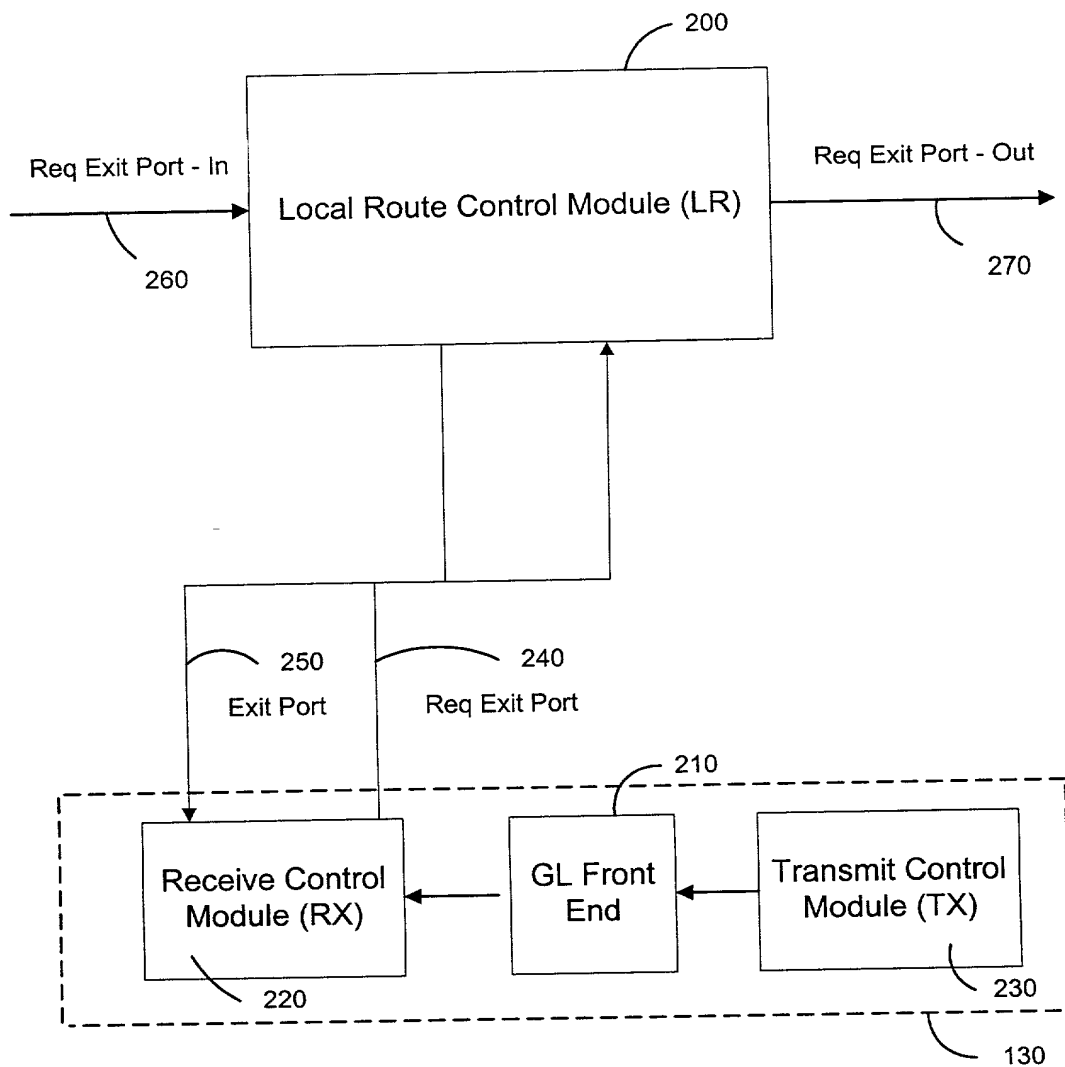


FIGURE 2A

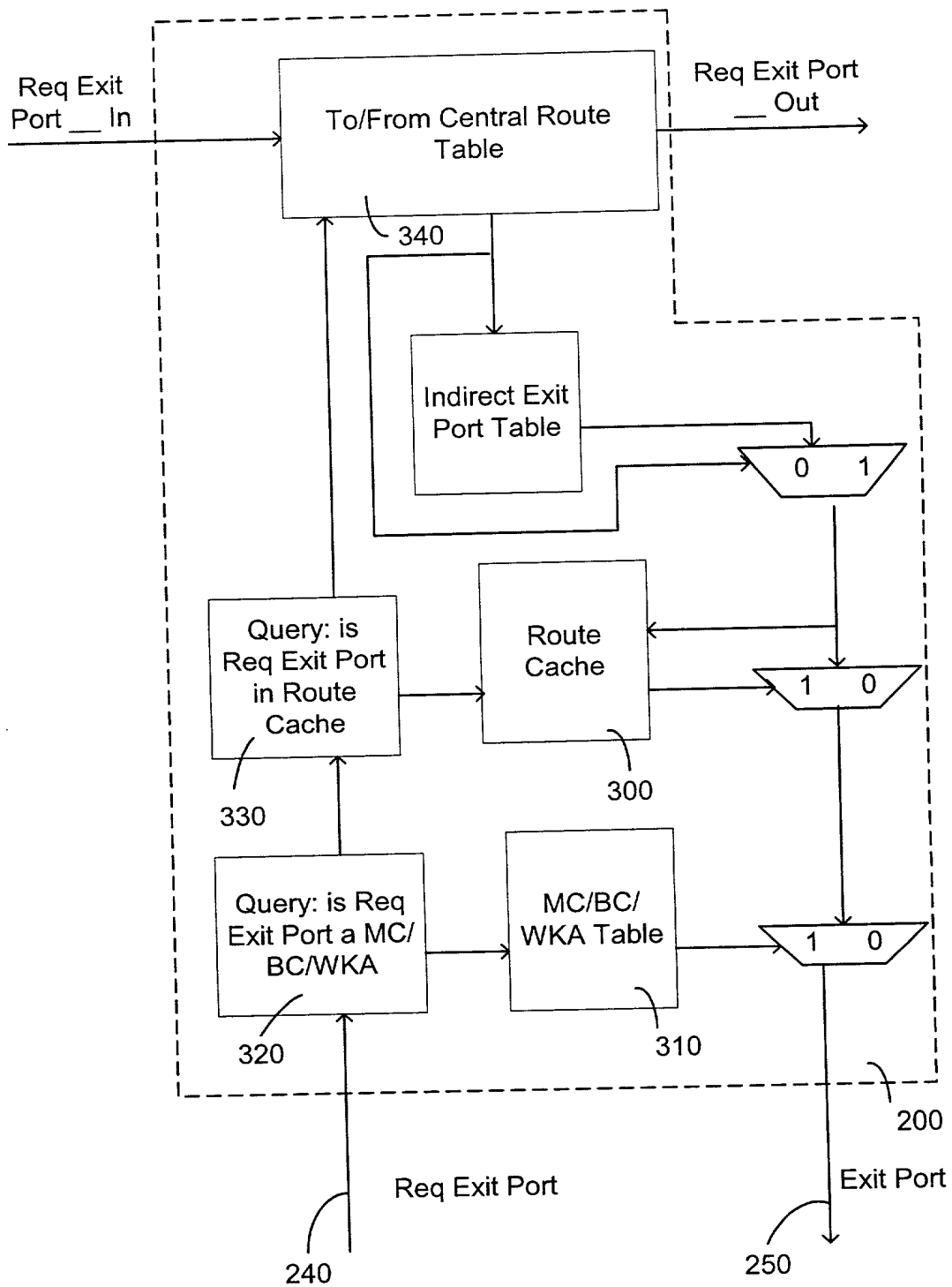


FIGURE 3

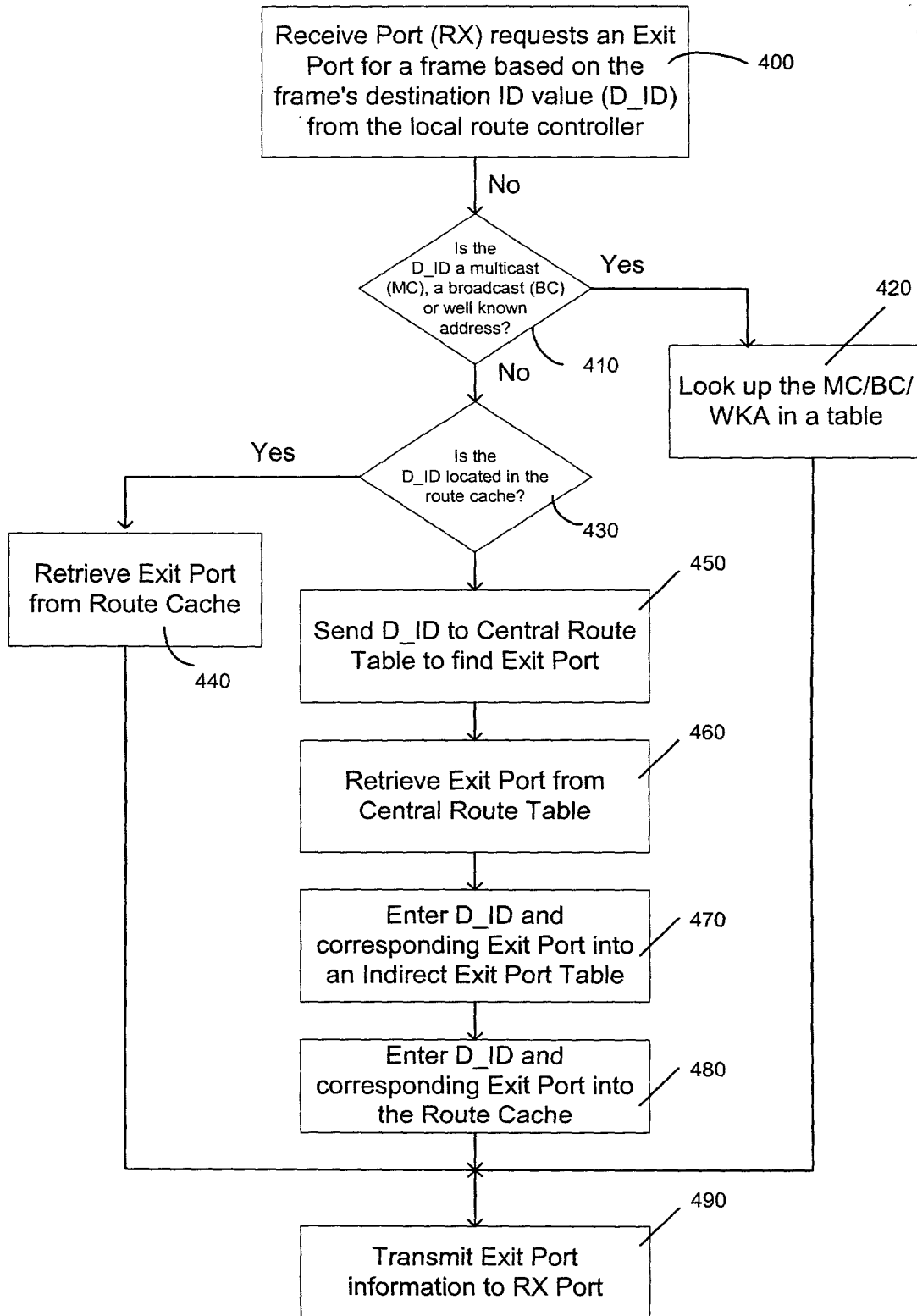


FIGURE 4

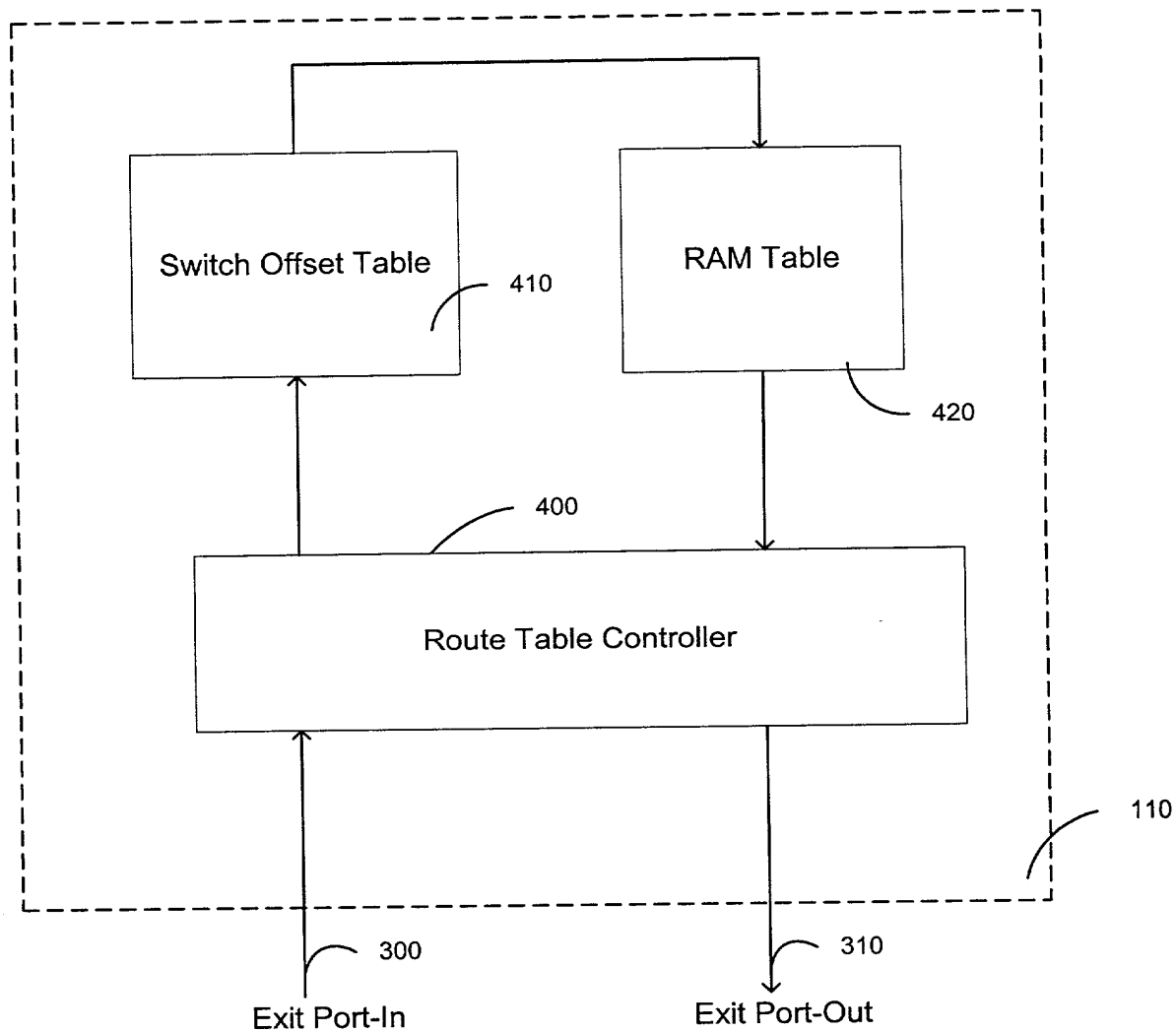


FIGURE 4A

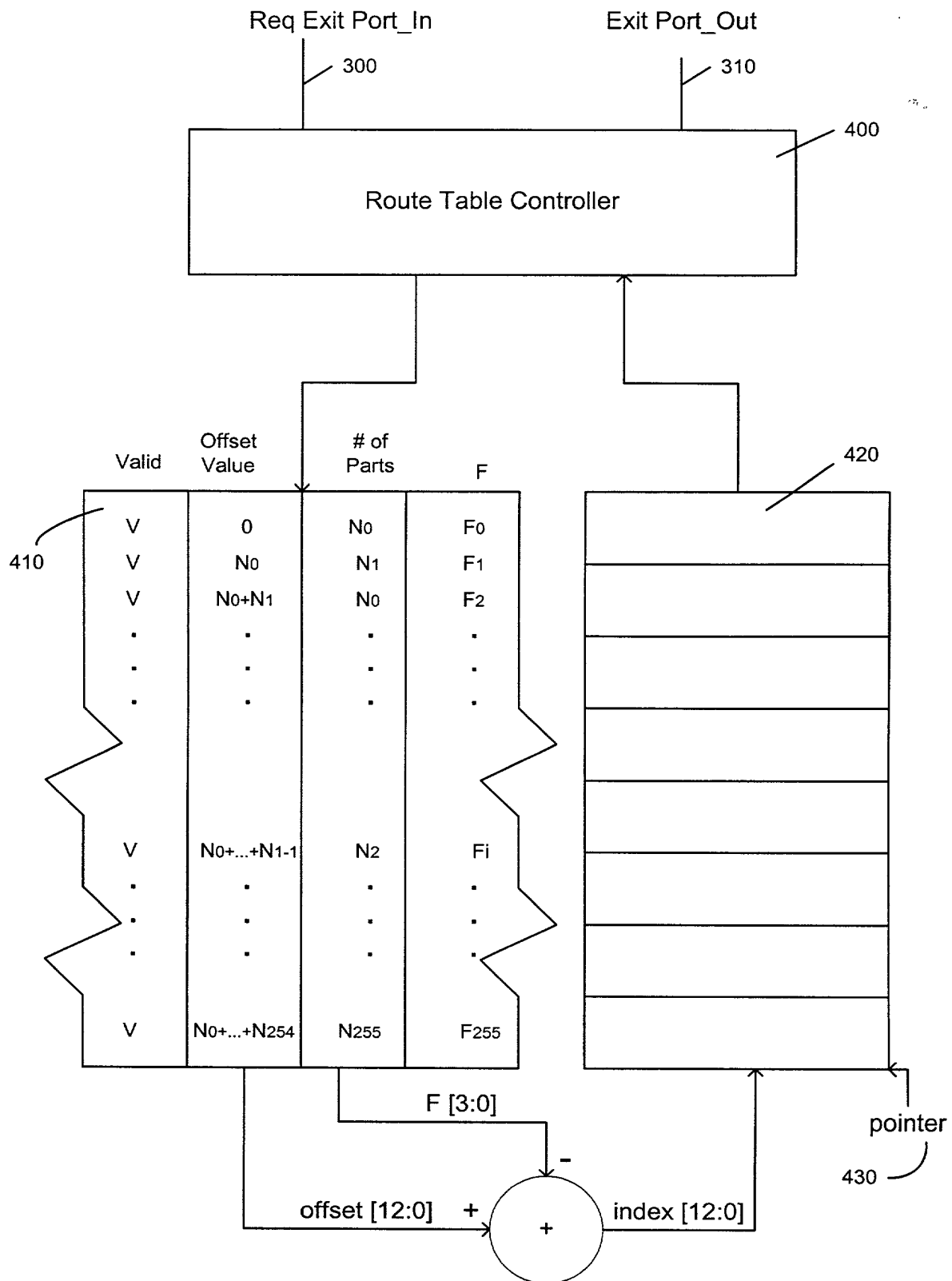


FIGURE 4B

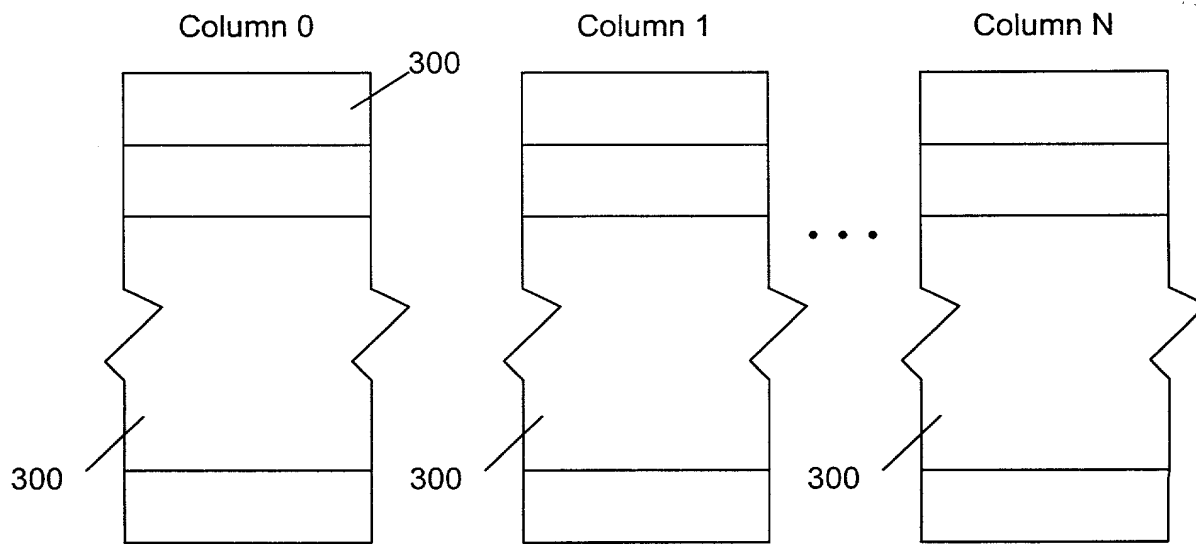


FIGURE 5A

Time Module 34

Column

0	W0	W1	W2	W3	W4	W5	W6	W7	W8	W9	W10	W11	W12	W13	W14	W15	W16
1	R0	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15	R16
2	W16	W0	W1	W2	W3	W4	W5	W6	W7	W8	W9	W10	W11	W12	W13	W14	W15
3	R16	R0	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
4	W15	W16	W0	W1	W2	W3	W4	W5	W6	W7	W8	W9	W10	W11	W12	W13	W14
5	R15	R16	R0	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14
...																	
30	W2	W3	W4	W5	W6	W7	W8	W9	W10	W11	W12	W13	W14	W15	W16	W0	W1
31	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15	R16	R0	R1
32	W1	W2	W3	W4	W5	W6	W7	W8	W9	W10	W11	W12	W13	W14	W15	W16	W0
33	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15	R16	R0

FIGURE 5B

2GBps Write		Column																
Time	Row	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
0T	0								SOF	A	B	C	D	E	F	G	H	I
20T	0	J	K	L	M	N	O	P										
34T	1								Q	R	S	T	U	V	W	X	Y	Z
54T	1	CRC	EOF															

2GBps Read after 2GBps Write										Column									
Time	Row	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
1T	0								SOF	A	B	C	D	E	F	G	H	I	
21T	0	J	K	L	M	N	O	P											
35T	1								Q	R	S	T	U	V	W	X	Y	Z	
55T	1	CRC	EOF																

FIFO 0		FIFO 1															
	SOF																
	B																
	D																
	F																
	H																
	J																
	L																
	N																
	P																
	R																
	T																
	V																
	X																
	Z																
	EOF																

FIGURE 6

2GBps Write		Column																
Time	Row	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
0T	0								SOF	A	B	C	D	E	F	G	H	I
20T	0	J	K	L	M	N	O	P										
34T	1								Q	R	S	T	U	V	W	X	Y	Z
54T	1	CRC	EOF															

1GBps Read after 2GBps Write																			Column																		
Time	Row	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16																			
1T	0								SOF	A	B	C	D	E	F	G	H	I																			
21T	0	J	K	L	M	N	O	P																													
35T																																					
55T																																					
69T	1								Q	R	S	T	U	V	W	X	Y	Z																			
89T	1	CRC	EOF																																		

FIFO_0	FIFO_1
SOF	A
B	C
D	E
F	G
H	I
J	K
L	M
N	O
P	Q
R	S
T	U
V	W
X	Y
Z	CRC
EOF	

FIGURE 7

1Gbps Write		Column																
Time	Row	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
0T	0								SOF	—	A	—	B	—	C	—	D	—
20T	0	E	—	F	—	G	—	H	—	I	—	J	—	K	—	L	—	M
54T	0	—	N	—	O	—	P	—										
68T	1								Q	—	R	—	S	—	T	—	U	—
88T	1	V	—	W	—	X	—	Y	—	Z	CRC	EOF						

2GBps Read after 1GBps Write																		
Time	Row	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1T	0								SOF	I	A	J	B	K	C	L	D	M
21T	0	E	N	F	O	G	P	H										
35T	1								Q	Z	R	CRC	S	EOF	T	—	U	—
55T	1	V	—	W	—	X	—	Y										

FIFO 0	FIFO 1
SOF	I
A	J
B	K
C	L
D	M
E	N
F	O
G	P
H	Q
Z	R
CRC	S
EOF	T
	U
	V
	W
	X
	Y

FIGURE 8

1GBps Write									Column									
Time	Row	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
0T	0								SOF	—	A	—	B	—	C	—	D	—
20T	0	E	—	F	—	G	—	H	—	I	—	J	—	K	—	L	—	M
54T	0	—	N	—	O	—	P	—										
68T	1								Q	—	R	—	S	—	T	—	U	—
88T	1	V	—	W	—	X	—	Y	—	Z	CRC	EOF						

1GBps Read after 1GBps Write										Column								
Time	Row	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1T	0								SOF	—	A	—	B	—	C	—	D	—
21T	0	E	—	F	—	G	—	H	—	I	—	J	—	K	—	L	—	M
35T	0	—	N	—	O	—	P	—										
55T	1								Q	—	R	—	S	—	T	—	U	—
69T	1	V	—	W	—	X	—	Y	—	Z	CRC	EOF						

FIFO_0	FIFO_1
SOF	
A	
B	
C	
D	
E	
F	
G	
H	
I	
J	
K	
L	
M	
N	
O	
P	
Q	
R	
S	
T	
U	
V	
W	
X	
Y	
Z	
CRC	
EOF	

FIGURE 9

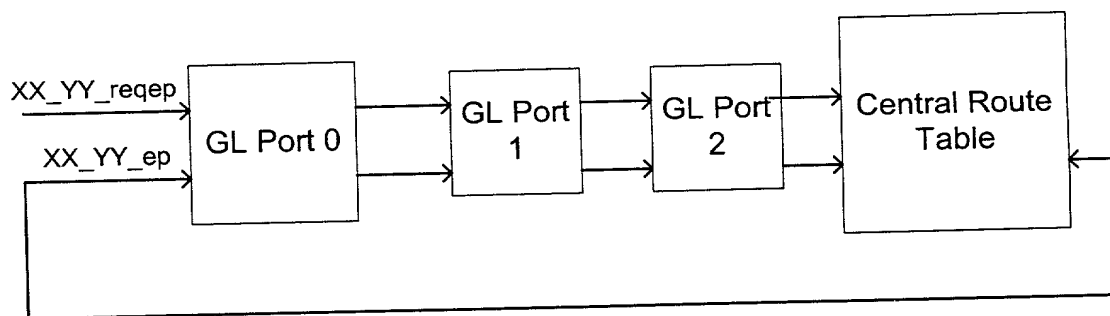


FIGURE 10